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43935 7590 07/12/2010 FRASER CLEMENS MARTIN & MILLER LLC 28366 KENSINGTON LANE PERRYSBURG, OH 43551				
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* LORENZO PARRINI

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Appeal 2009-003444  
Application 10/717,805  
Technology Center 3600

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Before WILLIAM F. PATE, III, MICHAEL W. O'NEILL, and KEN B.  
BARRETT, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

### STATEMENT OF THE CASE

Lorenzo Parrini (Appellant) seeks our review under 35 U.S.C. § 134 of the Examiner's decision rejecting claims 1-15. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

### THE INVENTION

Appellant's claimed invention pertains to a cable or belt used as an elevator support means. Spec. 1, ll. 5-6. Claim 1, reproduced below, is representative of the subject matter on appeal.

1. An elongated load-bearing support with load-bearing strands each having a plurality of fibers, the strands being surrounded by a sheath, the strands comprising:

a plurality of load-bearing fibers formed of a base material being in a first phase; and

a reinforcing material being in a second phase and being distributed in said base material whereby said reinforcing material increases a modulus of elasticity of the strands in a longitudinal direction of said fibers for supporting at least one of an elevator car and an elevator counterweight.

### THE REJECTIONS

The following Examiner's rejections are before us for review:

1. Claims 5, 10, and 15 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement;

2. Claims 8 and 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention;

3. Claims 1-7, 9-13, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over De Angelis et al. (US 5,566,786, issued Oct. 22, 1996) and Olesen et al (US 4,956,039, issued Sept. 11, 1990); and

4. Claims 8 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over De Angelis and LaNieve et al (US 6,162,538, issued Dec. 19, 2000).

### OPINION

*Claims 5, 10, and 15 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement*

Dependent claims 5, 10, and 15 recite that the reinforcing material is in the form of at least one of, *inter alia*, spheres, grains, capsules, discs and plates. The Examiner, alluding to the “whereby” phrase in each respective independent claim, questions whether the use of such shapes will increase the modulus of elasticity of the strands in the longitudinal direction. Ans. 3, 7. The Examiner appears to maintain that the prior art indicates that such shapes, when randomly distributed and having a higher stiffness than the base material, would degrade the modulus. *Id.* at 7-8. Appellant asserts that, “[w]hile random distribution and parallel distribution of the reinforcing material may result in different values, both create an increase in the modulus of elasticity of the strands in a longitudinal direction of the fibers as recited in the claims.” App. Br. 8.

The Examiner has the initial burden of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims. *See In re Wertheim*, 541 F.2d 257, 263 (CCPA 1976). The Examiner did not find that Appellant’s Specification fails to disclose the recited shapes or fails

to disclose that the use of those shapes will increase the modulus in the longitudinal direction as recited in the “whereby” phrases. The Examiner has not adequately explained why one of ordinary skill, upon reading Appellant’s Specification, would not recognize that Appellant had possession of the questioned subject matter. As such, we cannot sustain the rejection because the Examiner has not made a prima facie showing that Appellant’s Specification fails to satisfy the written description requirement of § 112, first paragraph.

*Claims 8 and 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite*

Independent claim 7 recites “a reinforcing material being in a second phase ... whereby said reinforcing material increases a modulus of elasticity of the strands in a longitudinal direction of said fibers.” Claim 8 depends from claim 7 and recites “wherein ... said second phase reinforcing material increases a modulus of elasticity of said fibers in a radial direction of said fibers.” Independent claim 11 and its dependent claim 14 recite similar language in the context of a method.

We do not agree with the Examiner’s conclusion (Ans. 4) that it is unclear as to whether the radial direction language of each dependent claim is to replace or add to the longitudinal direction language of the respective independent claim. When read in conjunction with their respective independent claim, dependent claims 8 and 14 recite both the longitudinal and the radial directions. We reverse the indefiniteness rejection of claims 8 and 14.

*Claims 1-7, 9-13, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over De Angelis and Olesen*

Appellant contends that the rejection is in error because neither reference discloses a *fiber* having a second phase<sup>2</sup> distributed in the base material of a first phase. *See* App. Br. 9, 11. Appellant also argues that the combined references would result in a two-phase cable sheath rather than the claimed two-phase fiber. *Id.* at 11.

The Examiner found that De Angelis discloses a load-bearing support device having a sheath surrounding strands comprised of arimid fibers (a base material of a first phase), where the strands are impregnated with a reinforcing material, a polyurethane solution, of a second phase – but found that De Angelis’ reinforcing material is externally applied to the fibers. Ans. 5, 9; *see also* Olesen, col. 5, ll. 1-8 and col. 6, ll. 48-53 (suggesting that the understanding in the synthetic composite body art is that a strand comprised of fibers is “impregnated” in that the impregnating material, *e.g.* hot melt plastic, flows into the strands but between, not into, the individual fibers). The Examiner further found that Olesen teaches a thermoplastic sleeve having “the distribution of reinforcing material of one phase within a base material of another (second) phase.” Ans. 5; *see also id.* at 6. The Examiner concluded that it would have been obvious to modify De Angelis’ base material (the fibers) because Olesen’s objective was to manufacture a composite cable-like body which satisfies the requirements of relatively high tensile and compressive forces. *Id.* at 5, 10.

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<sup>2</sup> According to Appellant’s Specification, a phase is a solid, liquid or gaseous body having physical and chemical properties which are homogenous or at least vary without discontinuity. Spec. 3, ll. 13-17.

Olesen's two-phase material is a sleeve layer applied over the core string formed of filaments and hot melt adhesive between the filaments. Olesen, col. 6, ll. 29-31, 48-53; col. 6, l. 67 – col. 7, l. 4. The Examiner does not direct us to any disclosure in either De Angelis or Olesen of a two-phase fiber or filament. The Examiner does not adequately explain why one of ordinary skill would find it obvious to incorporate a second phase into the fiber of De Angelis, rather than into the sheath (sleeve) over the fibers as suggested by Olesen. As such, we cannot sustain the obviousness rejection based on De Angelis and Olesen.

*Claims 8 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over De Angelis and LaNieve*

As mentioned above, the Examiner rejected claims 8 and 14 based on the position that it is unclear as to whether the claims recite limitations directed to both the longitudinal and radial directions or to only the radial direction. The Examiner states: "For purpose of prosecution, the former (e.g. radial direction only) will be applied." Ans. 4; *see also id.* at 8. We have construed the claims as reciting both directions, and therefore the Examiner has applied an incorrect claim construction to the prior art. The Examiner's findings appear to only pertain to the radial direction, and the Examiner does not address the longitudinal direction language of the claims. *See* Ans. 11 (finding that LaNieve et al teaches "increasing a modulus of elasticity of their fibers in a radial direction and, therefore, meeting the claim language."); *see also id.* at 7. As such, the Examiner has not made sufficient findings and has not provided adequate reasoning to explain why one having ordinary skill in the art would have arrived at the subject matter of claims 8

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and 14 in view of De Angelis and LaNieve. Accordingly, we cannot sustain the rejection.

**DECISION**

The decision of the Examiner to reject claims 1-15 is reversed.

**REVERSED**

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